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#### NOTICE OF ALLOWANCE AND FEE(S) DUE

25889 7590 03/04/2009

COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576 EXAMINER
BAKER, DAVID S

PAPER NUMBER

ART UNIT

DATE MAILED: 03/04/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/574,402	04/03/2006	Helmut Rieder	RIEDERHETAL3PCT	5902			
TITLE OF INVENTION; INFRARED (IR)RECEIVER DEVICE							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/04/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includired below or directed oth	of transmitting the 1330 ig the Patent, advance of herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees will pondence address; a	be mailed to the current ad/or (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
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PLEASE NOTE: Uni	ess an assignee is ident	ified below, no assignee	data will appear on the p	atent. If an assignee	is identified below, the d	ocument has been filed for
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Please check the appropri	iate assignee category or	categories (will not be pr	inted on the patent):	Individual U Corp	oration or other private gr	oup entity Government
4a. The following fee(s)	are submitted:	48	. Payment of Fee(s): (Plea	se first reapply any	previously paid issue fee	shown above)
Issue Fee			A check is enclosed.			
Advance Order -	to small entity discount p	permitted)	☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).			
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5. Change in Entity Stat	tus (from status indicate s SMALL ENTITY statu		h Applicant is no lon	ger claiming SMAIT	ENTITY status. Sec 37 C	FR 1 27(a)(2)
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/574,402	04/03/2006	Helmut Rieder	RIEDERHETAL3PCT 5902		
25889 7.	590 03/04/2009		EXAMINER		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			BAKER, DAVID S		
			ART UNIT	PAPER NUMBER	
			2884		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 286 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 286 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/574 402 RIEDER ET AL. Notice of Allowability Examiner Art Unit DAVID'S BAKER 2884 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 23 December 2008. The allowed claim(s) is/are 1-4,6 and 8-12. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 12/23/08 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material

/David S Baker/ Examiner, Art Unit 2884 Other .

#### DETAILED ACTION

## Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under Ex Parte Quayle, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.
 Applicant's submission filed on 23 December 2008 has been accepted and entered.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frederick Dorchak on 19 February 2009.

The application has been amended as follows; please amend the abstract such that the notation "(Fig. 1)" is deleted. The new abstract will read:

#### Abstract:

An infrared (IR) receiving device (1) with IR detector elements (3) for receiving IR signals from a communication zone (5), as well as with a processing circuit for deriving electric signals corresponding to the IR signals received, wherein the IR detector elements (3) are provided in at Application/Control Number: 10/574,402

Art Unit: 2884

least one matrix-type arrangement (2) which corresponds to a matrix-type segmentation of the communication zone (5), and the processing circuit comprises a maximum detector circuit (9) connected to the IR detector elements (3), which maximum detector circuit (9) selects one respective maximum output signal from among the output signals of the IR detector elements (3) for deriving the electric signal.

Page 3

(Fig. 1)

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## Information Disclosure Statement

The IDS filed 12 December 2008 has been accepted, entered, and considered.

## Allowable Subject Matter

- Claims 1-4, 6, and 8-12 are allowed.
- The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art of record does not disclose or reasonably suggest, along with the other claimed limitations, an infrared detector array comprising, namely: the combination of a processor circuit having a maximum detector circuit, wherein each IR detector element for selecting the maximum output signal has at least one consecutive diode, the diodes being interconnected by their sides facing away from the IR detector element. The prior art of record, such as Scott, discloses the use of readout diodes connected via their cathodes to a common node. However, not every IR detector element has its own readout diode; the diodes are shared along detector element rows or columns. Essentially, each detector element must have an output diode, which is not the detector

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element itself, wherein these output diodes are connected via their cathodes to a common node as part of a maximum detector circuit as well as a connection from each detector element to a common threshold value forming unit; the specific circuitry layout as claimed is not present in the prior art of record.

Regarding claims 2-4, 6, and 8-10, the claims are found allowable due to their dependence upon an already allowed claim and lacking any technical errors.

Regarding claim 11, the prior art of record does not disclose or reasonably suggest, along with the other claimed limitations, an infrared detector array comprising, namely: the combination of a processor circuit having a maximum detector circuit, wherein each IR detector element for selecting the maximum output signal has at least one consecutive diode, the diodes being interconnected by their sides facing away from the IR detector element. The prior art of record, such as Scott, discloses the use of readout diodes connected via their cathodes to a common node. However, not every IR detector element has its own readout diode; the diodes are shared along detector element rows or columns. Essentially, each detector element must have an output diode, which is not the detector element itself, wherein these output diodes are connected via their cathodes to a common node as part of a maximum detector circuit as well as a connection from each detector element to a common threshold value forming unit; the specific circuitry layout as claimed is not present in the prior art of record.

Regarding claim 12, the prior art of record does not disclose or reasonably suggest, along with the other claimed limitations, an infrared detector array comprising, namely; the combination of a processor circuit having a maximum detector circuit, wherein each IR detector element for selecting the maximum output signal has at least one consecutive diode, the diodes being interconnected by their sides facing away from the IR detector element. The prior art of record, such as Scott, discloses the use of readout diodes connected via their cathodes to a common node. However, not every IR detector element has its own readout diode; the diodes are shared along detector element rows or columns. Essentially, each detector element must have an output diode, which is not the detector element itself, wherein these output diodes are connected via their cathodes to a common node as part of a maximum detector circuit as well as a connection from each detector element to a common threshold value forming unit; the specific circuitry layout as claimed is not present in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

GB 2385198 A – Lam discloses a similar matrix style IR detector array with a maximum signal detection circuit but fails to discloses the threshold value forming unit that is commonly connected to each IR detector element.

DE 4239863 A1 – Sauer discloses a matrix style IR detector array that lacks a maximum signal detection circuit and a threshold value forming unit where each is individually connected to the IR detector elements.

US 6,567,200 B1 – Pammer discloses an IR sensor array detector that uses a summing circuit to amplify the collected signals of each individual sensor of the array.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID S. BAKER whose telephone number is (571)272-6003. The examiner can normally be reached on MTWRF 10:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David S Baker/ Examiner, Art Unit 2884 /David P. Porta/ Supervisory Patent Examiner, Art Unit 2884